Reply to Office Action of August 10, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Canceled).
- (Currently Amended) A method for controlling an operation of a compressor of a refrigerator, the method comprising:

varying a compression capacity of a compressor installed in—the_a refrigerator by controlling a rotation direction of the compressor according to a load condition of the refrigerator, wherein the compression capacity of the compressor increases when the compressor is rotated—eloekwise_in a first_rotation_direction with respect to a rotational axis of the compressor and decreases when the compressor is rotated—eountereloekwise_in a second rotation direction that is opposite to the first rotation direction, and wherein the controlling the rotation direction of the compressor comprises:

performing a defrosting operation when a temperature inside the refrigerator and a pre-set defrosting temperature are identical; and

when the defrosting operation is terminated, rotating the compressor-eloekwise in the first rotation direction and repeatedly stopping and rotating the compressor ecountereloekwise in the second rotation direction at pre-set time periods; and

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when an operation mode of the refrigerator is selected by a user, selecting the

rotation direction of the compressor according to an amount of cooling air supply

corresponding to the selected operation mode, and controlling a rotation speed of the

compressor in the selected rotation direction by varying an operation frequency of the

compressor based on a temperature inside the refrigerator.

3-4. (Canceled).

5. (Currently Amended) The method of claim 4, further comprising:

when the compressor is rotated-clockwise in the first rotation direction according to the

operation mode of the refrigerator, detecting a current applied to the compressor, and if the

detected current is greater than a pre-set reference current, the compressor is continuously

rotated-clockwise in the first rotation direction, and if the detected current is smaller than the

reference current, the compressor is turned off; and

when the compressor is rotated-counterclockwise in the second rotation direction

according to the operation mode of the refrigerator, if the detected current is smaller than the

pre-set reference current, the compressor is continuously rotated counterclockwise in the second

rotation direction, and if the detected current is greater than the pre-set reference current value,

the compressor is turned off.

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(Previously Presented) The method of claim 4, further comprising:

sensing the rotation direction of the compressor; and

if the rotation direction of the compressor needs to be changed according to a change of a temperature of the refrigerator, stopping the operation of the compressor for a predetermined time period and then changing the rotation direction of the compressor.

7. (Currently Amended) The method of claim 4, further comprising:

when the operation mode of the refrigerator selected by the user is a power saving operation mode, the compressor is rotated counterclockwise in the second rotation direction, and then when the temperature inside the refrigerator is higher than a pre-set temperature, the compressor is rotated-clockwise in the first rotation direction; and

when the operation mode of the refrigerator selected by the user is a standard operation mode, the compressor is rotated-clockwise in the first rotation direction, and then, when the temperature inside the refrigerator reaches the pre-set temperature, the compressor is rotated counterclockwise in the second rotation direction.

(Previously Presented) The method of claim 7, further comprising: 8.

setting an operation range of a temperature sensor that senses the temperature inside the refrigerator according to the rotation direction of the compressor; and

sensing the temperature inside the refrigerator according to the set operation range.

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9. (Currently Amended) The method of claim 8, wherein when the compressor is

rotated-clockwise in the first rotation direction, the operation range of the temperature sensor is

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-0.5°C~+0.5°C.

10. (Currently Amended) The method of claim 8, wherein when the compressor is

rotated-counterclockwise in the second rotation direction, the operation range of the

temperature sensor is -0.3°C~+0.3°C.

11. (Currently Amended) The method of claim 8, wherein a refrigerant amount of the

refrigerating cycle of the refrigerator is set as an amount of a refrigerator of the compressor

when the compressor is rotated-counterclockwise in the second rotation direction.

12. (Currently Amended) The method of claim 8, wherein a refrigerant amount of the

refrigerating cycle of the refrigerator is calculated when a temperature of an evaporator of the

refrigerator and a temperature of an entrance of the evaporator are identical while the

compressor is being rotated-counterclockwise in the second rotation direction, and the calculated

refrigerant amount is set as a refrigerant amount of the compressor.

13-35. (Canceled).

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